Amendment to the Claims

Claims 1-20 (Cancelled)

21.(New)   A visible/near-infrared spectrometry method comprising steps of:

irradiating a sample specimen with visible light and/or near-infrared light in the wavelength range 400 nm to 2500 nm or a part of the range;

analyzing the spectra of transmitted light, reflected light, and/or transmitted/reflected light obtained from said sample specimen;

determining the presence and/or measuring the characteristics of respective specific components present in said sample specimen,

wherein said method further comprises steps of:

measuring spectra while giving predetermined conditions including at least 3 times repeated irradiations as conditions to generate transitional changes of spectral response pattern while activating water existing within and/or around said sample specimen to promote interaction between water molecules and predetermined component included in said sample specimen;

conducting spectral and/or multivariate analysis to detect transitional changes in spectral response patterns;

building a model assuming that components of known sample specimen can be determined and/or that characteristics of said components can be measured using the detected transitional changes of the spectral response patterns;

conducting the same spectral and/or multivariate analysis on unknown(new) sample specimen while giving the same conditions as said predetermined conditions: and,

comparing with the built models to predict components of unknown sample specimen and/or characteristics of the components.

22.(New)   A visible/near-infrared spectrometry method according to claim 21 wherein said

predetermined condition changes are perturbations (water activating perturbations: WAP) to induce physical or chemical changes to said sample specimen by activating water existing within and/or around said sample specimen, and the perturbations are any one or a combination of at least 3 times repeated light irradiations, change of sample specimen concentration, extension of irradiation time, electromagnetic force application, light path-length changes, temperature changes, pH changes, and pressure changes.

23.(New)　　A visible/near-infrared spectrometry method according to claim 22 wherein the perturbations, the concentrations of sample specimen are changed in step value by a factor of 10 (e.g. 10^{-1} to 10^{-10}) to promote interaction between water and predetermined components, and respective concentrations are subjected to at least 3 times repeated irradiations to promote an interaction between water and the predetermined components.

24.(New)　　A visible/near-infrared spectrometry method according to claim 23 wherein determined are bacteria in said sample specimens and the bacteria are CNS (coagulase-negative staphylococcus) and CPS(coagulase-positive staphylococcus).

25.(New)　　A visible/near-infrared spectrometry method according to claim 22, wherein the spectrometry is conducted while giving perturbations in which sample specimen concentrations are changed in step values and respective changed samples are subjected to at least 3 times consecutive repeated irradiations, to detect protein PrP(CU) and/or PrP(Mn) which contain metal component and protein PrP containing no metal component.

26.(New)　　A visible/near-infrared spectrometry method according to claim 22, wherein the spectrometry is conducted while giving perturbations in which light path-length and/or concentrations are changed and respective changed samples are subjected to at least 3 times consecutive repeated irradiations, to determine protein PrP(metal) containing metal components and protein PrP containing no metal components.

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27.(New)   A visible/near-infrared spectrometry method according to claim 22, wherein the spectrometry is conducted while giving perturbations in which sample specimen concentrations are changed in step values by a factor of 10 and respective changed samples are subjected to repeated irradiations, to measure antigen concentrations in the sample specimen.

28.(New)   A visible/near-infrared spectrometry method according to claim 22, wherein the spectrometry is conducted while giving perturbations in which sample specimen concentrations are changed in step values and respective changed samples are subjected to at least 3 times consecutive repeated irradiations, to measure a diameter of granule in pre-dissolved state of the granule dissolved in the sample.

29.(New)   A visible/near-infrared spectrometry method according to claim 22, wherein the spectrometry is conducted while giving perturbations in which sample specimen concentrations are changed in step values by a factor of 10 and respective changed samples are subjected to at least 3 times consecutive repeated irradiations, to determine different types of bacteria in the sample specimen.

30.(New)   A visible/near-infrared spectrometry method according to claim 22, wherein the spectrometry is conducted while giving perturbations in which the spectrometry is conducted at least one time each in the morning and in the evening per day for a plurality of consecutive days, and the spectrometry is again conducted at least one time each in the morning and in the evening per day for a plurality of consecutive days after feeds are changed, to estimate component concentrations of biological fluids including blood plasma and rumen juice of mammals such as cows based on raw milk spectra of the mammals.

31.(New)   A visible/near-infrared spectrometry method according to claim 22, wherein the spectrometry is conducted while giving perturbations in which the spectrometry is conducted at

least one time each in the morning and in the evening per day for a plurality of consecutive days, and the spectrometry is again conducted at least one time each in the morning and in the evening per day for a plurality of consecutive days after feeds are changed, to estimate component concentrations of raw milk of the mammals such as cows based on the spectra of biological fluids including blood plasma and rumen juice of the mammals.

32.(New)   A visible/near-infrared spectrometry method according to claim 22, wherein the spectrometry is conducted while giving perturbations in which light path-length are changed and respective changed samples are subjected to at least 3 times consecutive repeated irradiations and the spectrometry is conducted only in first wavelength range, or conducted in the first and second wavelength range, said first wavelength being in range from 700 nm to 1100 nm and said second wavelength being in range from 1100 nm to 2400 nm, to measure concentrations of plural components of raw milk.

33.(New)   A visible/near-infrared spectrometry method according to claim 22, wherein the spectrometry is conducted while giving perturbations in which 10 V. voltage is applied and light in the wavelength range from 500 to 1000 nm is consecutively irradiated at least 3 times, to measure fat concentrations of raw milk.

34.(New)   A visible/near-infrared spectrometry device comprising:

a near-infrared light generating means capable of irradiating a sample specimen with near-infrared light or visible and/or near-infrared light in the wavelength range from 400 nm to 2500 nm or part of that range;

an optical means for irradiating said visible light and/or near-infrared light to the sample specimen;

a detecting means for obtaining spectra of transmitted light, reflected light, or transmitted/reflected light from said sample specimen; and

a data processing means for conducting a predetermined multivariate analysis on obtained

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spectra,

wherein the visible/near-infrared spectrometry device further comprises: a perturbation giving means for giving perturbations by adding predetermined condition changes to the sample to generate transitional changes in spectral response to activate water existing within and/or around said sample specimen to promote interaction between water molecules and specific component included in said sample specimen; and

said data processing means conducting a spectral analysis on all or a part of the wavelength range of spectral responses obtained by giving perturbations.

35.(New)   A visible/near-infrared spectrometry device according to Claim 34, wherein said perturbation giving means expose the sample specimen to water activating perturbations (WAP) to induce physical or chemical changes to said sample specimen by activating water existing within and/or around said sample specimen, and comprises an irradiation controlling unit for controlling irradiation time and number of irradiations are provided.

36.(New)   A visible/near-infrared spectrometry device according to Claim 35, wherein said perturbation giving means comprises at least one of means capable of adjusting electromagnetic power, changing light path-length, and changing temperature; and a controlling means for controlling perturbations given by said perturbation giving means and operation timing between irradiating light and receiving light so as to irradiate light and receive light from probes which comprises said optical means and said detecting means together or separately and perform data processing.

37.(New)   A visible/near-infrared spectrometry device according to Claim 36, wherein said data processing means execute the spectral analysis of the responses to specific perturbations followed by data analysis for all or part of several distinct wavelengths ranges will allow the detection of bio-macromolecular structures and functions and these changes.

38.(New)   A visible/near-infrared spectrometry device comprising:

a sample specimen containing unit;

a perturbation giving means for giving perturbations by adding predetermined conditions to the sample specimen;

an optical means for irradiating visible light and/or near-infrared light in the wavelength range 400 nm to 2500 nm or a part of the range to the sample specimen, said lights being in a predetermined specific wavelength range corresponding to the sample specimen;

a detecting means for obtaining spectra of transmitted light, reflected light, or transmitted/reflected light from the sample specimen;

a data processing means for conducting a predetermined multivariate analysis on obtained spectra; and

a displaying means for display a measurement result.

39.(New)   A visible/near-infrared spectrometry device according to claim 38, wherein important wavelengths ranges which are optimal for measuring respective sample specimens are predetermined.